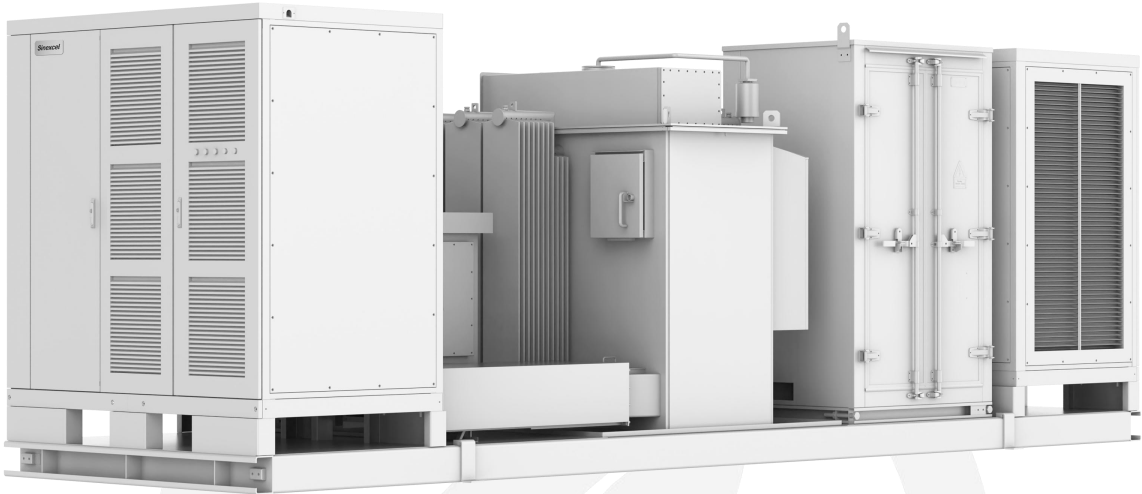


# SES3-2580/3450-MV-EX-Skid

## Prefabricated Inverter Substation



### Features



#### Flexible Configuration

- Integrated inverter and booster, highly compact
- Improves space efficiency, easier installation
- Modular, configurable power



#### High Efficiency & Stability

- 1500V wide-range DC voltage
- Multi-branch DC design prevents battery looping currents



#### Intelligent Collaboration

- Automated peak shaving operation
- VSG / PQ / VF mode capabilities
- Islanding, black start capable



#### Safety & Compatibility

- With LVRT and HVRT
- 4-quadrant active and reactive power control
- Fast power response (<10ms)

# MVS Product Specification

Model	SES3-2580/3450-MV-EX-Skid
<b>AC AND DC PARAMETER</b>	
Rated Power	N*215kW@45°C, N*129kW@50°C, shut down@60°C (N for number of PCS module, N=9~16)
Maximum power	110% * Rated Power, 2min (≤45°C)
AC Voltage	10kV-34.5kV (Consult with Sinexcel for other voltage level)
AC Frequency	50Hz/60Hz
DC voltage range	1000~1500V (1070~1500V for full load discharging)
Number of DC BUS	2*1/4/8 (Based on PCS branches)
DC fuses size	300A per module
THDi/THDu	<3%
<b>LC AND AUXILIARY EQUIPMENT</b>	
Aux. Transformer	150kVA, 690V\400V, 50Hz, 3P4W (Consult with Sinexcel for Customized)
UPS	Up to 1kVA (0.5h Standard) (Consult with Sinexcel for more capacity)
Meter	Meters for Aux. Power Consumption and PCS
Communication method	RS485, CAN, TCP/IP (via gateway)
Cooling Method	Temperature controlled forced air cooling
<b>TRANSFORMER</b>	
Capacity	3610kVA@45°C Based on PCS rated power
Transformer Vector	Oil-immersed transformer
Transformer protection	Protection relay for pressure, temperature (two levels) and gas.
Oil retention tank	Galvanized steel. Integrated with hydrocarbon filter. Optional
Winding type	Dy11y11 (Consult with Sinexcel for customized)
MV AC voltage level	6.3/12/24/36kV (Consult with Sinexcel for other voltage level)
LV AC voltage	690V (Consult with Sinexcel for other voltage level)
AC frequency	50\60Hz
Efficiency	Tier 2 (From EU548)
Transformer impedance	5.75%~8%
Cooling type	ONAN (Based on project requirement)
Insulation level	Class A

# MVS Product Specification

CONNECTION AND PROTECTION		
Switchgear configuration	DeV\CV\CCV (Consult with Sinexcel for customized)	
Switchgear protection	Medium-voltage vacuum circuit breaker(V)	
Internal arc classification medium-voltage control room (according to IEC 62271-202)	20kA 3s	
LV-MV connections	Copper bar or cable	
LV protection	Motorized CB in PCS	
MV protection	Microcomputer protection	
DC protection	Circuit Breaker and Fuses	
GENERAL PARAMETER		
Size (W*H*D)	8000*2553*2200 mm (Skid) (Based on configuration of RMU)	12192*2896*2438 mm (40ft Container)
Weight	≤20t	
Enclosure	IP54 for Overall (IP68 for transformer)	
Corrosion Prevention	C4 (Only applicable to external mechanical part)	
Operating temp.	-20 °C to 60 °C (De-rating over 45 °C)	
Storage temp.	-50 °C to 70 °C	
Operating Humidity	0~95% (No condensing)	
Storage Humidity	0~100%(No condensing)	
Max elevation	Standard 1000 m (Consult with Sinexcel for other elevation)	
Inverter Max. Efficiency	98.5%	
Voltage regulation accuracy	≤±1%	
Current regulation accuracy	≤±1%	
CERTIFICATION		
Compliance	IEC62477/IEC61000/G99/VDE4110/ EN50549-2/IEC60076/IEC62271 (Consult with Sinxcel for more certification information )	